



## Spt8 (yC-17): sc-26264

### BACKGROUND

The SPT8 gene encodes a 602 amino acid protein with an extremely acidic amino-terminus. Spt8 is a component of the wildtype *S. Cerevisiae* SAGA complex which activates transcription of a subset of RNA-polymerase II-dependent genes. The interaction of TATA-binding protein (TBP) and SAGA at particular promoters and the functional interaction between Spt3 and TBP requires Spt8. Wildtype SAGA inhibits TBP binding to the HIS3 promoter *in vitro*, while SAGA lacking Spt3 or Spt8 is not inhibitory. Therefore, the composition of SAGA may be dynamic *in vivo* and regulated through dissociable inhibitory subunits. Normal transcription of Ty elements, and initiation of Ty transcription from  $\delta$  sequences involves Spt8. Mutations in the SPT8 gene result in a sporulation defect and are strong suppressors of insertion mutations caused by Ty elements and long terminal repeat sequences called  $\delta$  sequences.

### REFERENCES

1. Winston, F., Dollard, C., Malone, E.A., Clare, J., Kapakos, J.G., Farabaugh, P. and Minehart, P.L. 1987. Three genes are required for *trans*-activation of Ty transcription in yeast. *Genetics* 115: 649-56.
2. Happel, A.M. and Winston, F. 1992. A mutant tRNA affects  $\delta$ -mediated transcription in *Saccaromyces Cerevisiae*. *Genetics* 132: 361-74.
3. Eisenmann, D.M., Chapon, C., Roberts, S.M., Dollard, C. and Winston, F. 1994. The *Saccharomyces cerevisiae* SPT8 gene encodes a very acidic protein that is functionally related to SPT3 and TATA-binding protein. *Genetics* 137: 647-57.
4. Belotserkovskaya, R., Sterner, D.E., Deng, M., Sayre, M.H., Lieberman, P.M. and Berger, S.L. 2000. Inhibition of TATA-binding protein function by SAGA subunits Spt3 and Spt8 at Gcn4-activated promoters. *Mol. Cell Biol.* 20: 634-47.
5. Bhaumik, S.R. and Green, M.R. 2002. Differential requirement of SAGA components for recruitment of TATA-box-binding protein to promoters *in vivo*. *Mol. Cell Biol.* 22: 7365-71.
6. Sterner, D.E., Belotserkovskaya, R., Berger, S.L. 2002. SALSA, a variant of yeast SAGA, contains truncated Spt7, which correlates with activated transcription. *Proc. Natl. Acad. Sci. USA* 99: 11622-7.

### SOURCE

Spt8 (yC-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Spt8 of *Saccharomyces cerevisiae* origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26264 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### APPLICATIONS

Spt8 (yC-17) is recommended for detection of Spt8 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.